

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

**Permit Issue Date:**

**Region:** Washington Regional Office  
**County:** Martin  
**NC Facility ID:** 5900107  
**Inspector's Name:** Robert Bright  
**Date of Last Inspection:** 05/19/2016  
**Compliance Code:** 3 / Compliance - inspection

<p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> Weyerhaeuser NR Company - Plymouth Lumber</p> <p><b>Facility Address:</b> Weyerhaeuser NR Company - Plymouth Lumber NC Hwy 149 N Plymouth, NC 27962</p> <p><b>SIC:</b> 2421 / Sawmills &amp; Planing Mills General <b>NAICS:</b> 321113 / Sawmills</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>	<p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> <b>NSPS:</b> <b>NESHAP:</b> 40 CFR 63, Subpart DDDD <b>PSD:</b> <b>PSD Avoidance:</b> 15A NCAC 02Q. 0317 <b>NC Toxics:</b> <b>112(r):</b> <b>Other:</b></p>
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Contact Data			Application Data
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<p><b>Application Number:</b> 5900107.16A <b>Date Received:</b> 05/06/2016 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal</p> <p style="text-align: center;"><b>Existing Permit Data</b></p> <p><b>Existing Permit Number:</b> 06389/T22 <b>Existing Permit Issue Date:</b> 06/20/2014 <b>Existing Permit Expiration Date:</b> 01/31/2017</p>
Vernetta Rascoe Environmental Coordinator (252) 791-3242 PO Box 787 Plymouth, NC 27962	Gerald Cooper Mill Manager (252) 791-3228 PO Box 787 Plymouth, NC 27962+0787	Vernetta Rascoe Environmental Coordinator (252) 791-3242 PO Box 787 Plymouth, NC 27962	

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	3.00	20.87	435.13	50.86	14.64	29.95	20.54 [Methanol (methyl alcohol)]
2013	2.40	20.70	432.41	50.29	14.73	29.34	20.16 [Methanol (methyl alcohol)]
2012	1.90	21.10	414.30	50.97	14.44	27.67	18.97 [Methanol (methyl alcohol)]
2011	1.90	3.90	331.82	11.48	8.59	22.75	19.48 [Methanol (methyl alcohol)]
2010	---	---	239.04	1.96	5.69	17.77	16.19 [Methanol (methyl alcohol)]

<p><b>Review Engineer:</b> Urva Patel</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 06389/T23 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b></p>
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## 1. Purpose of Application and Facility Description

Currently, this facility holds Title V Permit No. 09904T22 with an expiration date of January 31, 2017. The Title V renewal application (Application No. 5900107.16A) was received on May 2, 2016, which was nine months prior to expiration date of the Title V Permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

## 2. Facility Description

The facility is a lumber mill producing dimensional lumber from whole logs. Processes include debarking, hogging, planing, sawing, edging, and drying.

## 3. History / Background / Application Chronology

The following list provides a very brief summary of Title V permit revisions for this facility:

Permit History since the Permit Renewal

<u>Permit No.</u>	<u>Issuance Date</u>	<u>Description of Revision</u>
06389T21	February 20, 2012	Title V Air Permit renewed.
06389T22	June 20, 2014	Under this minor modification, the permit was modified to include updates of emission sources, insignificant activities list, relisting facility-wide annual production limits, and removing Toxic Air Pollutant (TAP) limits for Maximum Achievable Technology (MACT) sources.
	May 2, 2016	Received application for Title V Permit renewal
	October 3, 2016	Emailed Mr. Robert Bright from Washington Regional Office to verify the following: <i>“Total lumber drying capacity from all kilns (site-wide) not to exceed 270 million board feet per 12-month period”</i> Is it a maximum capacity of Kilns (facility-wide) or limitation? He indicated it’s a statement of maximum capacity of Kilns

## 4. Summary of Changes to the Existing Permit (Permit No. 06389T23)

Page No.	Section	Description of Changes
Cover Letter	N/A	Update cover letter for application date, permit numbers, date, PSD increment statement and Chief name.
Permit Cover	N/A	Insert new issuance and complete application date and application number
3	Equipment Table	Amended footnote (asterisk) words as its Kilns’ maximum drying capacity (facility-wide), NOT a production limit
4	2.1 A Table	Added reference “(40 CFR §63.2252)” in the Table
8	2.1 D Table	Added reference “(40 CFR §63.2252)” in the Table
9	2.1 D.4.c	Added Compliance sentence “The Permittee shall perform kiln operation...”
10	2.1 E. Table	Corrected Applicable regulation reference for VE i.e. 15A NCAC 2D .0521 instead of 15A NCAC 2D .1806
Permit	Section 2 and Section 3	Updating regulation references from “2D” and “2Q” to “02D” and “02Q” to be consistent with regulation nomenclature.

## 5. Compliance Status

The DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on May 19, 2016, Robert Bright of the Washington Regional Office (WaRO) indicated that the facility appeared to be operating in compliance with all applicable requirements. Additionally, a signed Title V Compliance Certification (Form E5) indicating that the facility was in compliance with all applicable requirements, was submitted with Application No. 5900107.16A on May 6, 2016.

#### Five Year Compliance History:

- On April 1, 2015, NOD sent to Weyerhaeuser NR Company as the allowable PM emission rate determined by 15A NCAC 02D .0515 was exceeded by the facility via combustion of dry planar sawdust in the No. 6 Continuous Dry Kiln (ID No. ES-11-9S; CDK) without a permit on February 8, 2015. Mr. Robert Bright of the WaRO inspected the facility on May 12, 2015 and concluded that the facility appeared to be operating in compliance with all applicable air quality regulations and permit conditions at the time of inspection.

## 6. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 02D .0512, Particulates from Miscellaneous Wood Products Finishing Plants  
15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes  
15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources  
15A NCAC 02D .0521, Control of Visible Emissions  
15A NCAC 02D .0530, Prevention of Significant Deterioration  
15A NCAC 02D .0958, Work Practices for Sources of Volatile Organic Compounds  
15A NCAC 02D .1100, Control of Toxic Air Pollutants  
15A NCAC 02D .1111, Maximum Achievable Control Technology (40 CFR 63, Subpart DDDD)  
15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions  
15A NCAC 02Q .0317, Avoidance Conditions (for 15A NCAC 02D .0530, Prevention of Significant Deterioration)

Unless specifically noted, a detailed discussion of the permit conditions is not included in this review as the applicability status has not changed. The permit conditions have been modified to reflect the most current language, where necessary. The facility is required to be in continued compliance.

## 7. NSPS, NESHAP/MACT, NSR/PSD, 112(r), CAM:

### NSPS

This facility is **NOT** subject to New Source Performance Standards (NSPS). This permit renewal does not affect this status.

### NESHAP/MACT

This facility is subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63.

- 15 NCAC 02D. 1111: National Emission Standards for Hazardous Air Pollutants [40 CFR 63, Subpart DDDD – Plywood and Composite Wood Products] for two steam heated lumber kilns (**ID No.: ES-11-6S and ES-11-7S**) and two continuous direct-fire lumber kilns (**ID No.: ES-11-9S and ES-11-10S**). Although subject, the kilns have no applicable requirements under the Subpart other than initial notification. The current permit includes this notation. The permit condition has been modified to reflect the current language where necessary and continued compliance is expected.

### NSR/PSD

This facility is not one of the specific source categories listed in the PSD regulations. Therefore, the threshold for this facility is 250 tons per year. As the facility emits more than 250 tons per year of VOC, it is defined as a major source under the Prevention of Significant Deterioration (PSD) requirements pursuant to 15A NCAC 2D .0530. This permit renewal does not change this status. The permit includes the following PSD subject permit conditions:

1. 15A NCAC 02Q .0317, Avoidance Conditions for 15A NCAC 02D .0530, Prevention of Significant Deterioration for the mold inhibitor application system (**ID No. ES-MIAS**). The Permittee is required to limit VOC emissions from this source to less than 39.9 tons per year. To ensure compliance with this requirement, the Permittee is required to calculate monthly VOC emissions based on material usage and submit semiannual reports of those calculations. This permit renewal does not affect this status.

2. 15A NCAC 02D .0530, Prevention of Significant Deterioration for the two continuous wood-fired lumber drying kilns (**ID Nos. ES-11-9S and ES-11-10S**). The Permittee is required to comply with best available control technology standards for VOCs and CO from these sources. Each is discussed separately below:
  - VOCs: The Permittee is required to ensure that the dry bulb temperature of each kiln not exceed a set point of 260°F. To ensure compliance with this requirement, the Permittee is required to monitor and record the dry bulb temperature daily and submit semiannual reports of these temperatures. As part of this permit renewal, the WARO has requested that the BACT requirement be modified to more accurately reflect the intent of the originally BACT determination. It was not the intent that the Permittee show noncompliance with any one dry bulb temperature exceeding a set value, but for the “average” dry bulb temperature not to exceed this set value. The Permittee currently measures temperature throughout the entire length of the kiln. It is normal for certain areas (center of the kilns) to exceed this set point; however, the overall average temperature remains below (~30° less). This clarification has been made as part of this permit renewal.
  - CO: The Permittee is required perform operation and maintenance on each kiln according to manufacturer’s recommendations. Once again, the Permittee is required to record these maintenance activities and submit semiannual reports. This permit renewal does not affect this status.

### 112(r)

This facility is **NOT** subject to the requirements of the Chemical Accident Release Prevention Program, Section 112(r) of the Clean Air Act requirements as it does not store any of the regulated substances in quantities above the thresholds in 112(r). This permit renewal does not change this status.

### CAM

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all of the following criteria:

Criteria #1: The unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;

Criteria #2: The unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source (i.e., 100 tpy of any criteria pollutant or 10 tpy of any HAP, North Carolina); and,

Criteria #3: The unit is not exempt under 40 CFR 64.2(b).

The following table summarizes CAM applicability at Weyerhaeuser NR Company – Plymouth Lumber Mill:

Emission Unit	Criteria #1: Does the Source Use a Control Device?	Criteria #2: Pre-control PTE $\geq$ 100% of major source thresholds?	Criteria #3: Exempt Under 40 CFR 64.2(b)?	CAM Source?
ES-11-1S	PM <sub>10</sub> ; CD-7C (One Cyclone – 176” in diameter) PM <sub>10</sub> ; CD-11-1F (One Bagfilter – 4,923 ft <sup>2</sup> in filter area)	No	N/A	No
ES-30	PM <sub>10</sub> ; CD-30C (One Cyclone – 88” in diameter) PM <sub>10</sub> ; CD-30F (One Bagfilter – 1,658 ft <sup>2</sup> in filter area)	No	N/A	No
ES-31	PM <sub>10</sub> ; CD-31C (One Cyclone – 104” in diameter) PM <sub>10</sub> ; CD-31F (One Bagfilter – 1,658 ft <sup>2</sup> in filter area)	No	N/A	No

- These control devices were evaluated for CAM applicability at a previous Title V permit renewal (See Mr. Charlie Yirka’s Permit Review dated **September 12, 2007** for Permit No. **06389T16** for details). This was confirmed during the latest

permit renewal reviewed by Mr. Mark Cuilla on **February 20, 2012** for Permit No. **06389T21**. This permit renewal does not affect this status. No new control devices have been installed at the facility since the latest renewal.

## **8. Facility Emission Review**

Actual emissions for 2010 through 2014 are reported in the header of this permit review.

## **9. Public Notice/EPA and Affected State(s) Review**

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. There is no affected states/local program within 50 miles of the facility.

## **10. Other Regulatory Considerations**

- No application fee is required with this renewal application.
- A zoning consistency determination is not required for this application.
- A Professional Engineers Seal is not required with this application.
- A 30-day public notice and 45-day EPA review is required for this application.

## **11. Recommendations/Conclusion:**

The permit renewal application for Weyerhaeuser NR Company in Plymouth, Martin County, NC has been reviewed by DAQ to determine compliance with all procedures and requirements, as specified in the permit. The DAQ recommends the issuance of Air Permit No. 06389T23.